

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/004125

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B01L3/00 C12Q1/68 G01N1/28

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 B01L C12Q G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 229 297 A (SEABERG LEONARD J ET AL) 20 July 1993 (1993-07-20) column 1, line 46 - column 2, line 57 column 3, line 33 - line 57 column 12, line 19 - line 35 column 13, line 62 - line 6 column 14, line 16 - line 21; figures 1,3 column 14, line 61 - line 68; figures 9-14 column 15, line 32 - line 39; figures 9,11,12	1
X	column 15, line 60 - line 66 column 15, line 68 - column 16, line 2 column 17, line 47 - column 18, line 27; figure 14  ----- -/--	32

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents:

\*A\* document defining the general state of the art which is not considered to be of particular relevance

\*E\* earlier document but published on or after the international filing date

\*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

\*O\* document referring to an oral disclosure, use, exhibition or other means

\*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*Z\* document member of the same patent family

Date of the actual completion of the international search

29 June 2004

Date of mailing of the international search report

19/07/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax (+31-70) 340-3016

Authorized officer

Hocquet, A

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/004125

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 889 692 A (HOLTZMAN MARC E) 26 December 1989 (1989-12-26) column 2, line 44 - line 53 column 3, line 63 - column 4, line 13 column 4, line 50 - column 5, line 18	1
X	US 2002/018998 A1 (STEINBISS JOACHIM ET AL) 14 February 2002 (2002-02-14) cited in the application paragraph '0059!; figures 1,2	1,33
A	US 4 585 623 A (CHANDLER HOWARD M) 29 April 1986 (1986-04-29) the whole document	1
X	column 3, line 38 - line 55; figure 1	32
X	WO 03/031275 A (SIGNATURE BIOSCIENCE INC) 17 April 2003 (2003-04-17) paragraphs '0016!, '0028!; figures	1
A	US 6 197 595 B1 (FODOR STEPHEN P A ET AL) 6 March 2001 (2001-03-06) cited in the application	1
X	column 25, line 26 - column 26, line 18	33
A	WO 94/26414 A (SYNTEX INC) 24 November 1994 (1994-11-24) page 13, line 3 - line 10 page 14, line 38 - line 41 page 14, line 5 - line 19 page 17, line 26 - page 18, line 19	1-53
A	WO 00/75623 A (DNA RES INSTR LTD ; BAKER MATTHEW JOHN (GB)) 14 December 2000 (2000-12-14) cited in the application page 10, line 1 - line 30; figures	1-53
A	US 6 440 725 B1 (POURAHMADI FARZAD ET AL) 27 August 2002 (2002-08-27) cited in the application	
A	EP 0 687 502 A (BOEHRINGER MANNHEIM GMBH) 20 December 1995 (1995-12-20) cited in the application	

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-31,33-53

device comprising chambers of changeable volume  
---

2. claim: 32

device comprising a detachable chamber filled with a reagent  
---

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/EP2004/004125

### Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☒ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

#### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/004125

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5229297	A	20-07-1993	CA 1338505 C	06-08-1996
			DE 69009510 D1	14-07-1994
			DE 69009510 T2	05-01-1995
			DK 381501 T3	04-07-1994
			EP 0381501 A2	08-08-1990
			FI 94360 B	15-05-1995
			IE 63501 B1	03-05-1995
			JP 2536945 B2	25-09-1996
			JP 3007571 A	14-01-1991
			KR 161276 B1	16-11-1998
			KR 161352 B1	01-10-1999
			US 6645758 B1	11-11-2003
			AT 130373 T	15-12-1995
			AU 1664092 A	21-10-1992
			CA 2083173 A1	22-09-1992
			DE 69206080 D1	21-12-1995
			DE 69206080 T2	13-06-1996
			EP 0530357 A1	10-03-1993
			ES 2081613 T3	01-03-1996
			FI 925285 A	20-11-1992
			JP 8030704 B	27-03-1996
			JP 5507362 T	21-10-1993
			WO 9216659 A1	01-10-1992
US 4889692	A	26-12-1989	AU 4217889 A	02-04-1990
			WO 9002934 A1	22-03-1990
US 2002018998	A1	14-02-2002	DE 10006214 A1	16-08-2001
			EP 1123980 A2	16-08-2001
			JP 2001245684 A	11-09-2001
US 4585623	A	29-04-1986	EP 0241611 A1	21-10-1987
WO 03031275	A	17-04-2003	WO 03031275 A1	17-04-2003
US 6197595	B1	06-03-2001	US 5922591 A	13-07-1999
			US 6043080 A	28-03-2000
			US 5856174 A	05-01-1999
			US 6326211 B1	04-12-2001
			US 2001036672 A1	01-11-2001
			US 6168948 B1	02-01-2001
			US 2002022261 A1	21-02-2002
			AT 235559 T	15-04-2003
			AU 6404996 A	05-02-1997
			DE 69626988 D1	30-04-2003
			DE 69626988 T2	04-03-2004
			EP 1304388 A2	23-04-2003
			EP 0843734 A1	27-05-1998
			JP 11509094 T	17-08-1999
			WO 9702357 A1	23-01-1997
WO 9426414	A	24-11-1994	WO 9426414 A1	24-11-1994
WO 0075623	A	14-12-2000	AU 5236300 A	28-12-2000
			CA 2375449 A1	14-12-2000
			EP 1183514 A1	06-03-2002
			WO 0075623 A1	14-12-2000
			JP 2003501644 T	14-01-2003

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/004125

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6440725	B1	27-08-2002	US 2002042125 A1	11-04-2002
			US 2002039783 A1	04-04-2002
			US 2002055167 A1	09-05-2002
			US 2002045246 A1	18-04-2002
			US 2002187547 A1	12-12-2002
			US 2001012612 A1	09-08-2001
			US 2002019060 A1	14-02-2002
			AU 758407 B2	20-03-2003
			AU 1947299 A	19-07-1999
			AU 745989 B2	11-04-2002
			AU 8906698 A	08-03-1999
			CA 2301309 A1	25-02-1999
			CA 2312102 A1	08-07-1999
			EP 1179585 A2	13-02-2002
			EP 1003759 A2	31-05-2000
			EP 1042061 A1	11-10-2000
			JP 2001515216 T	18-09-2001
			JP 2001527220 T	25-12-2001
			WO 9909042 A2	25-02-1999
			WO 9933559 A1	08-07-1999
EP 0687502	A	20-12-1995	DE 4420732 A1	21-12-1995
			AT 234155 T	15-03-2003
			DE 59510578 D1	17-04-2003
			EP 0687502 A2	20-12-1995
			JP 3130449 B2	31-01-2001
			JP 8009957 A	16-01-1996
			US 5746978 A	05-05-1998